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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,962	12/05/2001	Werner Schafer	512425-2068	1833

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EXAMINER	
LEE, RIP A	

ART UNIT	PAPER NUMBER
1713	9

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,962	SCHAFER ET AL.	
	Examiner	Art Unit	
	Rip A. Lee	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2 and 5-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,5-14 and 16* is/are rejected.

7)☒ Claim(s) *15 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some* c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

This office action follows a response field on July 21, 2003. Applicants have amended claims 2, 5-8, and 10. Claims 1, 3, and 4 were cancelled, and new claims 14-17 were added.

Claim Objections

1. Claim 14 is objected to because of the following informalities: The claim is drawn to a separate step of drying a mixture, but this is not considered a process step *per se*. Rather, the mixture is dried as a result of spraying into a fluidized bed drier. Use of "spray drying" in line 3, or alternatively, deleting "drying the mixture" is recommended. Appropriate correction is required.

2. Claim 14 is objected to because of the following informalities: Change "chamber" to "drier." Appropriate correction is required.

3. Claim 14 is objected to because of the following informalities: The claim recites a step of "classifying particles." Again, the resulting particles are classified by the very fact that they have been subjected to spraying in a fluidized bed drier. Applicant may choose to use the term "classified particles" in line 5 of the claim. Appropriate correction is required.

4. Claim 15 is objected to because of the following informalities: Correct the spelling of "polymethacylate" to "polymethacrylate." Appropriate correction is required.

5. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim recites use of polymethacrylate, which is a separate species from the polyacrylate recited in claim 5. As such, claim 14 fails to limit further claim 5.

6. Claim 10 is objected to because of the following informalities: The claim uses "and/or" in line 2. Since use of the dispersant is mandatory but use of the wetting agent is optional, use of the "or" clause in claim 10 is incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 2, 5-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/31507 to Wolbrink *et al.* in view of U.S. Patent No. 5,554,217 to Bäbler for essentially the same reasons set forth in the previous office action (Paper No. 7).

Briefly, Wolbrink *et al.* teaches a process of preparing a pigment concentrate by comminuting pigment in the presence of an aqueous emulsion of binder to form a stable suspension or paste. The suspension is then subjected to a spray drying treatment (claim 1). The binder is a polyester or polyurethane resin (claim 4). The formulation also contains dispersant in order to stabilize the suspension or paste (page 2, line 15). The process results in the formation of a concentrate containing 35-65 wt % of pigment and 4-10 wt % of dispersant (page 2, line 20). The invention also relates to use of the pigment concentrate for coloring thermoplastics or thermosetting plastics (page 4, lines 11-17).

Wolbrink *et al.* teaches that suitable dispersants are surfactants having a HLB value of 10-18. And although the reference does not state that more than one surfactant can be used to achieve this, arriving at such a notion is obvious to one having ordinary skill in the art. Use of a combination of dispersant to achieve the correct HLB is well within the level of skill in the art, and it would not require undue experimentation.

Wolbrink *et al.* teaches use of spray drying, but it does not teach use of fluidized bed drying. However, Bäbler indicates that use of spray drying or fluidized-bed drying is equally suitable for drying pigment concentrates. Thus, the skilled artisan, having read both references, would find it obvious use fluidized bed drying with the expectation that such a method would achieve the same function.

Use of fatty acid esters and waxes as dispersant would be obvious to one skilled in the art, especially in light of the disclosure of Bäbler. Finally, there is no indication in the claim of what is meant by "form of beads" and what constitutes "uniform particle size," the subject matter of claim 8 is obvious in view of Wolbrink *et al.* (see claim 10). Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Allowable Subject Matter

10. Claims 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The subject matter of these claims is allowable since none of the cited references teaches use of PMMA or PTFE as the polymeric carrier. Also, the references do not teach use of organomodified siloxane as wetting agent.

Response to Arguments

11. The rejection of claims under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,554,217 to Bäbler alone and in combination with U.S. Patent No. 5,880,193 to Berke *et al.* have been withdrawn. Claim rejections have been overcome by amendment.

12. Applicants traverse the rejection of claims under 35 U.S.C. 103(a) as being unpatentable over WO 95/31507 to Wolbrink *et al.* in view of U.S. Patent No. 5,554,217 to Bäbler. Applicant's arguments have been considered fully, but they are not persuasive. Applicants submit that present claims, as amended, would appear to exclude the comminution step that is taught, and required, in the process of the prior art.

The present claim recites the step of mixing pigment presscake, dispersant, and pulverulent polymer carrier. Wolbrink *et al.* teaches comminuting pigment particles in the presence of aqueous binder. Although, the prior art teaches use of comminution (*i.e.*, milling or grinding), it may be construed that such a process constitutes "mixing" as recited in the present claims because that the process of Wolbrink *et al.*, indeed, results in mixing of components. In this case, it is not certain whether amended claims exclude comminution, as Applicants allege.

In view of the discussion above, the rejection of record has not been withdrawn.

Drawings

13. The drawings are objected to because of uncertainty of use of reference mark **4**. Applicants submit that **4** is a "filter nozzle." Such a proposal is not made clear from the drawing. It is also noted that reference mark **4** points to the arrow which appears to indicate flow direction within the chamber. From the specification, it would appear that **4** might represent the "bottom outlet" *as per* page 4, line 6.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

ral

October 15, 2003

DAVID W. WU
SUPERVISORY PATENT EXAMINER
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